



# **2022** Walleye Fishing Forecast



In March fisheries biologists and hatchery staff collect adult Walleye from the New River, Staunton River, and South Holston Reservoir for the production of fingerling Walleye to stock in selected lakes and rivers in Virginia. Walleye spawned or hatched at Vic Thomas, Front Royal, King and Queen, and Buller Fish Cultural Stations, are raised in ponds until they are about 1.5 to 2 inches in length. Ponds are harvested and walleye fingerlings are stocked in locations across the state. Additionally, female Walleye are crossed with male Sauger to produce the hybrid Saugeve. Saugeve perform well in some systems and are stocked with or in place of Walleye. In 2021, VDWR stocked approximately 1,049,811 Walleye or Saugeye fingerlings. Overall, in 2021 hatchery production was good and should lead to good Walleye fishing in 2022. The following table lists some of the lakes and rivers stocked and offers a rating of the population as "Excellent" (an abundant population), "Good" (decent numbers), or "Fair" (a few). For those anglers who want more in depth information on a particular water what follows are specific reports of Walleye sampling results and fishing details for the individual waters listed in the table. Anglers who want the challenge of catching a Walleye or Saugeve should fish one of the locations in this forecast.

Region	Water	Rating
Southwest Virginia	Flannagan Reservoir	Excellent
	South Holston Reservoir	Excellent
	Hungry Mother Lake	Good
	New River	Excellent
South Central Virginia	Staunton River	Excellent
	Leesville Lake	Fair
	Philpott Reservoir	Good
Northern Virginia	Lake Brittle	Good
	Burke Lake	Good
	Lake Orange	Fair
	Shenandoah River	Good
Eastern Virginia	Little Creek Reservoir	Good
	Lake Chesdin	Excellent

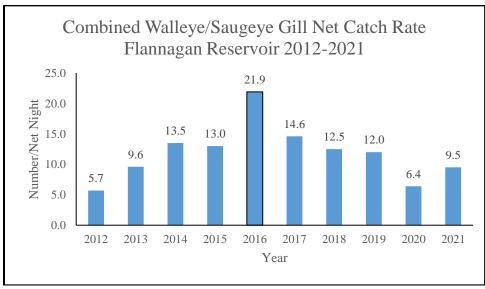


## **Southwest Virginia**



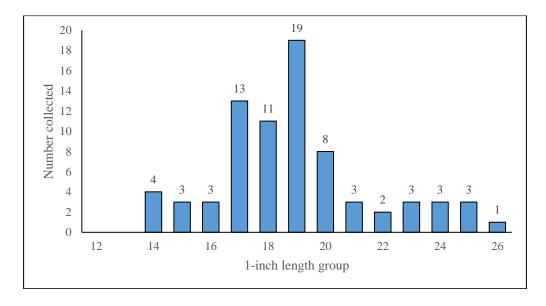
### Flannagan Reservoir

Fishing for Walleye on Flannagan Reservoir may continue to be somewhat challenging for anglers in 2022. VDWR biologists use the catch rate of Walleye in annual gill nets samples as a measure of the relative abundance of this species in the lake. The graph below shows the combined catch rate of Walleye and Saugeye (measured as the number collected per net set overnight) from 2012 – 2021. The catch rate in 2021 (9.5 /net night) represented a 33% increase in relative abundance compared to 2020 (6.4 /net night). However, it is still a 26% decrease from the 10 year average (12.8 /net night). This was the second time since 2012 Walleye catch rates dropped below the management target of 10/net night. This decline can largely be attributed to missed stockings in 2016 and 2018 due to insufficient hatchery production. These cohorts would have been Age-3 and Age-5 in 2021. These two age classes have historically made up a substantial proportion of the sample and their absence is reflected in the lower relative abundance observed. Fortunately, Walleye were stocked in Flannagan Reservoir in 2019 and 2020, which should help the population to rebound over the next couple of years. However, Flannagan received only about half of its allocation for 2021 due to insufficient hatchery numbers.



Walleye observed in the 2021 samples ranged from 15 - 27 inches in length with an average length of 20 inches (see graph below). Seventy percent of the adult fish

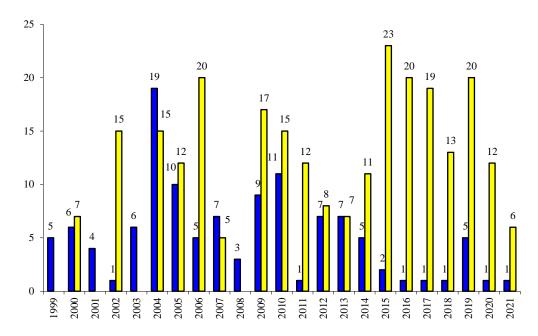
collected were ≥18 inches and 32% exceeded 20 inches in length. So although the overall number of Walleye and Saugeye are down, the majority of fish out there are of harvestable-size (18 inches or greater) and should provide good angling opportunities.



Many anglers target Walleye on the Cranesnest and Pound River arms of Flannagan Reservoir during the spawning run in March through April. However, anglers can also be very successful throwing top-water lures at night in May through early June, which coincides with the Alewife spawn. As the season progresses and water temperatures increase, the Walleye will move deeper in the lake. This will require anglers to switch tactics and troll nightcrawler harnesses and crankbaits.

#### South Holston Reservoir

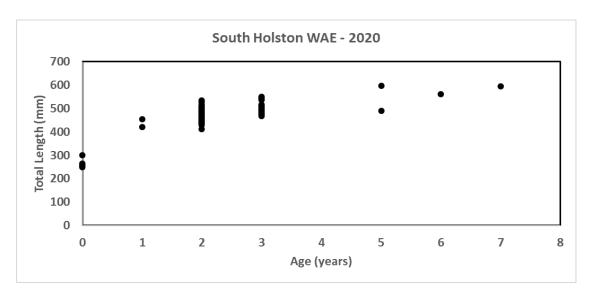
Anglers visiting South Holston Lake in 2022 should experience good Walleye fishing, although not as productive as in recent years. Sampling during 2021, including both electrofishing and gillnetting, exhibited a decline in catch, although a mostly desirable size structure remains with most Walleye collected during the fall gillnetting larger than 18 inches. Electrofishing catch rates during spring 2021 were 1 fish/hr. and below the long term average (7 fish/hr.), while the 2021 gillnet catch rate decreased to 6 fish per net and was well below the long term average (12 fish/net night). Winter gillnet surveys provide a more complete picture of the Walleye population at South Holston Lake in terms of population densities, growth rates, and survival of stocked fingerlings. A reduced stocking in 2016 of 42,640 Walleye fingerlings due to limitations in hatchery production resulted in a missing year class, which is now evident in our sampling efforts. Another reduced stocking of 83,344 Walleye fingerlings occurred in 2021 and will impact catch rates over the next several years. As a result, anglers should still enjoy the current state of the fishery, however; catch rates may be lower than normal.



**Figure 1**. Sampling catch rates for Walleye in South Holston Reservoir 1999-2021. Blue columns represent spring electrofishing catch rates (fish per hour) and yellow columns represent fall gillnet catch rates (fish per net).

Anglers can expect average fishing during the spring spawning "run" on the South Fork Holston River due to a reduced lake population. Anglers congregate near the community of Alvarado from February through April to catch Walleyes on the spring spawning "run". During May and June anglers find Walleyes feeding along the shorelines of the lake. The post spawn top water bite in the lower lake will yield the best Walleye fishing Virginia has to offer. When Walleyes move deeper during the summer months, successful anglers troll crawler harnesses on lead core line or use jigging spoons to reach the depths. Fall and winter fishing call for jigging spoons or jigs and live minnows.

Walleye growth is outstanding at South Holston Reservoir, so anglers should find plenty of fish larger than the minimum size of 18 inches. Most Walleye exceed 10 inches in their first year and measure 15 to 18 inches in their second year. Walleye generally reach 20 inches by their third year. Walleye growth slows after age four and males seldom exceed 24 or 25 inches in length, while females may reach lengths of 30 inches or more.



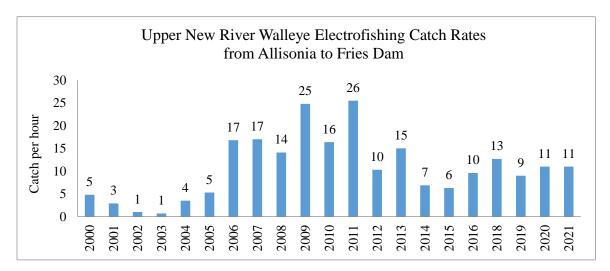
**Figure 2.** A summary of length at age data for Walleyes in South Holston Reservoir, based on fall gillnet data from 2020. Each circle represents an individual Walleye. For example, at age 1 some Walleyes are only 14 inches long and others are 17 inches long. Walleye are legally harvestable at 18 inches (457 mm).

### Hungry Mother Lake

This 108-acre lake provides anglers with a great opportunity to catch Walleyes in a small lake setting. Located in Hungry Mother State Park, the lake is also a great destination for families. The Walleye population is stable or slightly increasing. There are good numbers of fish up to 20 inches and just enough larger ones to cause anglers to lose some sleep this summer. Walleyes up to 28 inches in length have been landed in recent years. April, May, and June are the three best months, with night fishing generally being more productive. Most anglers use artificial lures, but live shad, minnows, and night crawlers are also very effective.

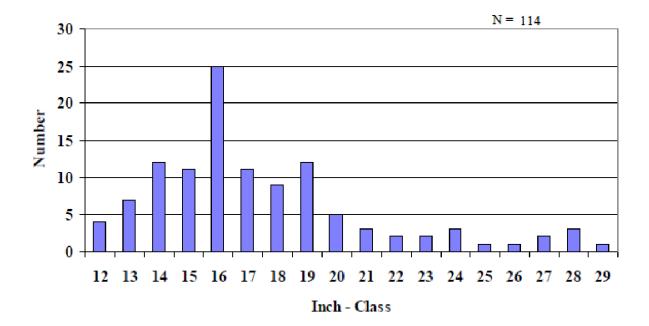
### Upper New River

In 2022, Walleye fishing on the Upper New River from Buck Dam downstream to Allisonia will be consistent with recent years due to annual stocking since 2014. In 2015 and 2017 to 2021, Walleye were stocked at multiple sites from Allisonia to Fries. As a result, annual Walleye catch rates in fisheries biologists' spring electrofishing surveys increased from the low catch rates recorded in 2014 and 2015.



Anglers fishing from Buck Dam to Claytor Dam will have to return 19 to 28 inch Walleye year round under the new size limit effective January 1, 2021 (explained below), but they should catch plenty of Walleye under 19 inches. In spring 2021 electrofishing samples, 64% of the Walleye collected were in the 14 to 19 inch size range.

Spring 2021 Electrofishing Walleye Size Ranges - Allisonia to Fries Dam



Anglers catch most Walleye in the Upper New River from February to April, but Walleye are also caught throughout the year. Crankbaits, jigs, and live minnows work well for catching them during the late winter and spring season. Ivanhoe, Foster Falls, and Allisonia are all good areas to fish.

When you fish for Walleye on the Upper New River, follow these size and creel limits:

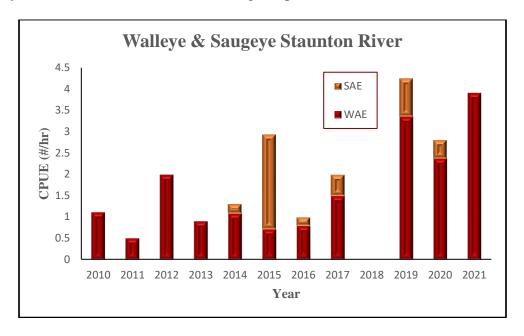
- 1. From Buck Dam downstream to Claytor Lake Dam: Year round: All Walleye 19 to 28 inches caught must be released unharmed. Anglers may keep 2 Walleye per day less than 19 inches or over 28 inches. This regulation allows anglers to harvest a few smaller male Walleyes (typically less than 19 inches) or a trophy female Walleye (typically greater than 28 inches) while protecting the best spawning-size Walleyes in the population.
- **2.** From Fries Dam downstream to Buck Dam: As of January 1, 2021, the statewide 18 inch minimum length limit, with a 5 per day creel limit for Walleye is in effect year round.

Biologists tagged Walleye in the Upper New River from 2008 to 2012 as part of a statewide Walleye research project. A cash reward of 20 dollars will still be offered for the return of these tags with catch information. Anglers can remove the tag by cutting through the monofilament attachment with scissors or a knife. The fish can then be released or harvested (the length limits listed above apply). Return the tag and catch information to the address printed on the tag. Catch information includes: date, time and general location of catch, "Was the fish harvested or released?", "Were you fishing for Walleye?", and "Did you catch other Walleye on this fishing trip?"

## **South Central Virginia**

#### Staunton River

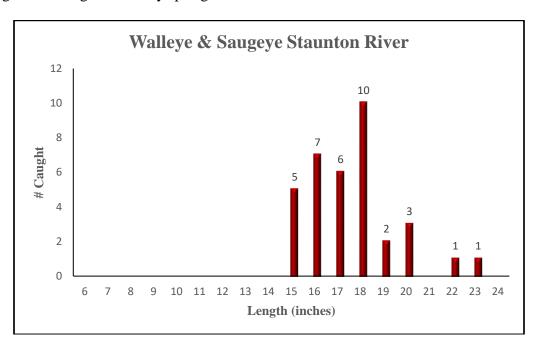
Walleye and Saugeye (Walleye X Sauger hybrid) fishing has really taken off in the Staunton River, especially from Leesville dam to Altavista. Quality Walleye are now consistently being caught and sampled all the way to Brookneal. Fingerling and fry stocking into the Staunton historically resulted in limited success. Fortunately, recent stockings of Walleye and Saugeye into Leesville Reservoir and the river have been much more successful and anglers are reaping the rewards. The first figure below shows how VDWR sampling success, measured by the number of fish collected per hour (CPUE), with fall electrofishing surveys has improved over time. Saugeye, which were stocked for three years when Walleye were unavailable, dominated the 2015 sample but now Walleye densities are improving and anglers are seeing good creels of Walleye. No Saugeye were collected in fall electrofishing samples in the Staunton in 2021.





The second figure shows the lengths and numbers of Walleye and Saugeye sampled in fall electrofishing surveys. Saugeye dominated the big fish catch but Walleye now make up most of the fishery. The largest fish sampled in 2021 was a 23-inch Walleye but several 18- and 19-inch Walleye were collected and will provide excellent action for those anglers looking for a late winter, early spring fishery. The legal minimum length limit is 18 inches and five fish can be harvested per day. For information on catching Walleye in the Staunton please view our video at the following link.

https://dwr.virginia.gov/blog/staunton-river-Walleye-fishing/ Another benefit of the stockings into Leesville and the Staunton River is a boost in the Walleye fishery at Kerr Reservoir. While they're still hard to target in this 50,000 acre reservoir, the opportunity to catch Walleye is improving each year. Good Walleye numbers are seen mid-lake around Goat Island in the fall and winter months but uplake fishing should be good in early spring.

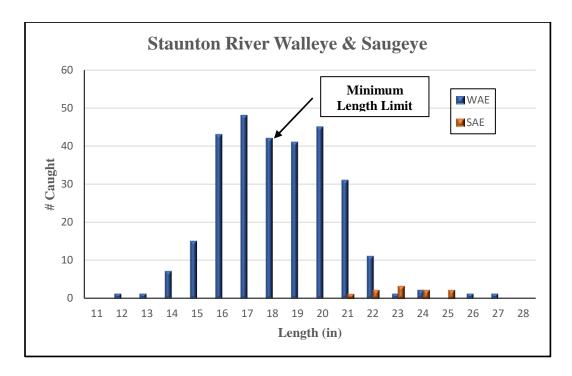


#### **Exploitation Study**

A tag reward study is being performed in 2020, 2021 and 2022 to assess the extent of angler exploitation of the Walleye/Saugeye fishery. Look for signs posted at public fishing ramps for additional information and return the tags if you are lucky enough to catch a tagged fish. It is very important information that will benefit the fishery! Please return tags to:

VDWR – Reward Program 107 Foxwood Drive Farmville, VA 23901

In 2020, 260 Walleye and 40 Saugeye were tagged for a total of 300 reward tags. Of those 300 tags, 50 were released into Leesville Lake to determine fishing pressure in the reservoir. Walleye that were 16-18 inches dominated the catch in 2020 and 2021, so anglers can expect a high density of legal fish in the river. Thirty tags were returned in 2020 for an exploitation or catch rate of 10% (corrected to 15% due to non-reporting bias). Again in 2021, 300 additional tags were placed in Walleye (290) and Saugeye (10) with 50 tagged Walleye going into Leesville Lake. Forty tags were returned in 2021 for an exploitation rate of 13% (corrected to 19% due to non-reporting bias). These initial results indicate that this is a developing fishery that has seen an increase in effort in the two years of the study. Tagging will likely conclude in 2022 with a goal of 300 additional fish being tagged in the river. This third year of the study will reveal if the fishery continues to recruit new anglers. The final figure shows the size and density of Walleye and Saugeye tagged in 2021.



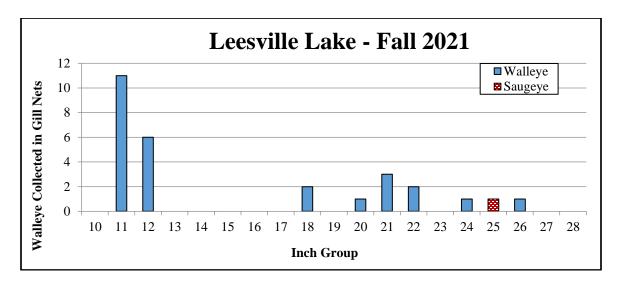
The Staunton River provides ample opportunity for anglers and paddlers alike. Enjoy this quality Walleye fishery!

#### Leesville Lake

The 2022 fishing season for Walleye/Saugeye at Leesville Lake will continue to be challenging. Fishing has historically been poor due to low retention of stocked Walleye in the lake as most Walleye eventually pass through the Leesville dam. This fishery routinely contains limited numbers of larger fish and the overall numbers of Walleye remain low compared to other Virginia Walleye lakes.

Saugeye were stocked in 2013 - 2015 and these fish survived and persisted much better in the lake than their Walleye counterparts. Beginning in 2014 and lasting through 2018, Saugeye numbers at Leesville Lake were higher than any previous Walleye population and peaked approximately five times higher than the historic Walleye average. However, the population started declining in 2018 and returned near to pre Saugeye stocking levels by 2019 and remains low. Both Walleye and Saugeye exit Leesville Lake through the dam into the Staunton River, which is accelerated during high rainfall years like 2018. Various data collections within Leesville Lake and the Staunton River confirm that high numbers of Walleye and Saugeye of all sizes pass through the Leesville Lake dam. Only Walleye have been stocked since 2016 to preserve the Staunton River Walleye population for hatchery broodstock collections.

The majority of the adult (over one year old) Walleye population is over 18 inches with a few Walleye in the 5-6 pound range. Walleye and Saugeye at Leesville have good growth rates and typically reach 18 inches between ages two and three. All adult Walleye collected in the fall of 2021 were at least 18 inches in length and 63% of the population was 22 inches or larger. More 6-month old Walleye were collected in the fall of 2021 than any other fall sample (since 2000) so there may be a good year class coming in the next couple of years.



The most productive Walleye fishing is typically between Leesville Dam and mile marker 6. Night fishing in May and June, with floating or shallow running plugs cast to the shoreline, should not be overlooked. These fish often frequent shallow water during the night in spring and early summer. During daylight hours in the spring, fish the shoreline contour, targeting depths of 10-20 ft., then move deeper if those depths are unproductive. Walleye are very light sensitive and prefer dark or shaded habitat; consequently, these fish will frequent shallower depths if the water is shaded or stained, but will remain deeper during the day if the water is clear. Rock cliffs and steeper shorelines should be the most productive, with some coves also holding fish. As water temperatures increase in late spring and throughout the summer, fish continue moving deeper, seeking cooler water, and become most active during nighttime hours.

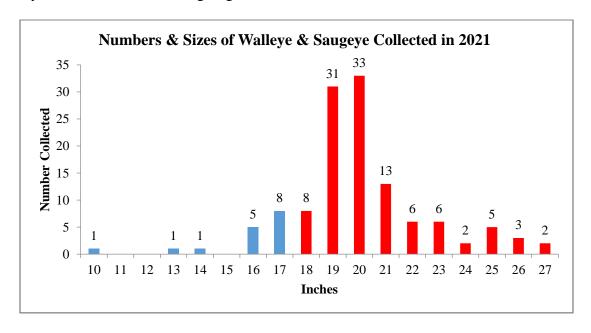
Leesville can be a challenge due to extreme daily water fluctuations and low densities, but anglers who spend time learning productive Walleye angling techniques for Leesville and concentrate on habitats that hold Walleye, may encounter a number of these elusive fish. Leesville Lake experiences very light fishing pressure and can provide solitude for anglers looking to avoid crowds and boating traffic.



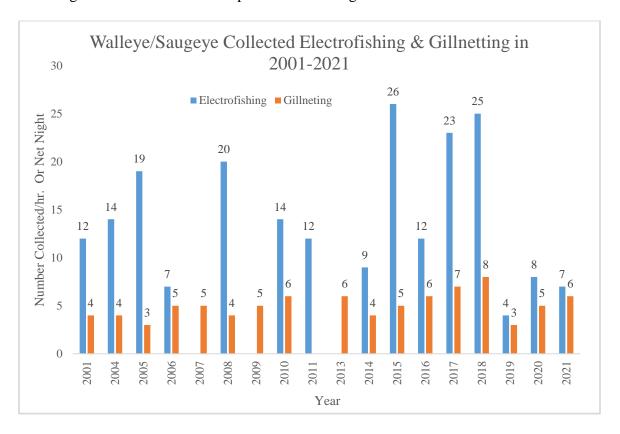
### Philpott Reservoir



Anglers continue to catch Walleyes in Philpott Reservoir as Walleye population numbers are stable following two years of stocking at a rate of 50 fish per acre. Philpott remains one of the better Walleye populations in Virginia as fish population surveys from 2021 showed the majority of the catch in the 17-23 inch (2-2.5 pound) range. A total of 125 Walleye and Saugeye combined were collected in 2021 with an average total length of 19 inches (2-2.5 pounds). Eighty-one percent of the Walleyes collected in 2021 sampling efforts were 18 inches or longer. Anglers fishing Philpott for Walleye reported catching quality size fish in 2021. The following chart shows the sizes and numbers of Walleye and Saugeye biologists collected in 2021. The red bars on the chart indicate legal size (18") fish. Walleye reach 18 inches at about 2.5 years of age and most male Walleye grow very slowly after reaching this size. Female Walleye typically grow well for another few years, with some achieving larger sizes.



Walleye population abundance in Philpott Reservoir is measured using two sampling methods: electrofishing in the spring and gillnets in the fall. The reason for using two sampling methods is that when compared to bass, Walleyes are less likely to be associated with shoreline habitat during early April. Because these daytime electrofishing catch rates may not always accurately represent the Walleye population, gillnets are also used. Electrofishing catch rates vary considerably from year to year, as seen in the chart below. Electrofishing catch rates for the May 2021 sample was (7/hr.) and the gillnet catch rate of 6 fish per net was average.



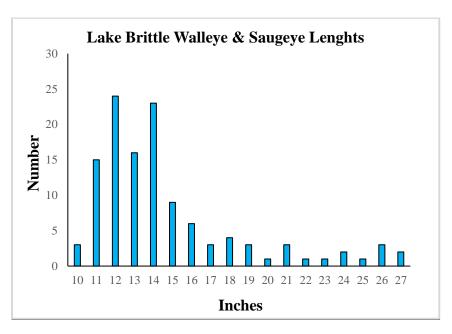
Skilled anglers, who spend time learning effective techniques for Walleye and find areas that are productive, should have successful fishing trips. Top-water night fishing is very popular and productive during the Alewife spawn in May and June. By late June, Walleye start moving into deeper water and are caught on nightcrawler harnesses and plugs trolled in deeper water. As water temperatures increase throughout the summer, Walleye continue to move deeper seeking cooler water. Anglers must fish deeper throughout the summer or fish at night to capitalize on this fishery. Catching a few Walleye per outing is considered good, however, some reports from anglers in 2021 reported difficulty locating and catching a few Walleye per trip. Perhaps 2022 will be more productive for Walleye anglers.

## <u>Northern Virginia</u>

#### Lake Brittle

Lake Brittle's Walleye population continues to recover from a downtrend after stocking at a higher rate the previous three years. Electrofishing catch rates increased to 38 fish/hour in 2021 (from 28 fish/hour in 2020) including fish over 8 lbs. The high catch rate was mainly due to an abundance of fish stocked in 2020. Stocking rates of Walleye was historically 100/acre however, due to a declining population; it was increased to 200/acre in 2019. The reason for the decline was likely poor juvenile survival from 2014

through 2017. A variety of environmental issues could have contributed including lake drawdowns during dam and spillway renovation, emergence of dense *Hydrilla*, and prolonged high/turbid water conditions due to increased storm water runoff. Biologists are working to mitigate some of the issues leading to poor survival and are hopeful that survival of juveniles stocked since 2019 will help the lake rebound from the current low population. The lake still provides a suitable population of Walleye and has some of the best bank and boat access in Northern Virginia. During 2021 electrofishing surveys, 19% of Walleye collected were legal (18") which was an increase from 12% the previous year. Stronger year classes since 2019 should provide improved fishing and size structure. Average sample size was 15.2". An 18-inch minimum/5 per day limit is in effect at Lake Brittle.

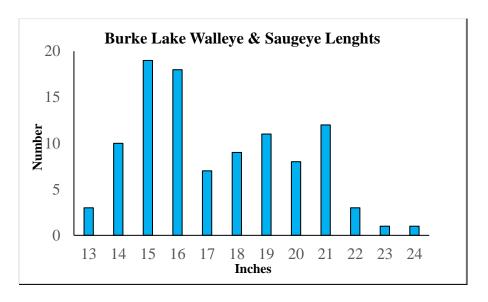




#### Burke Lake

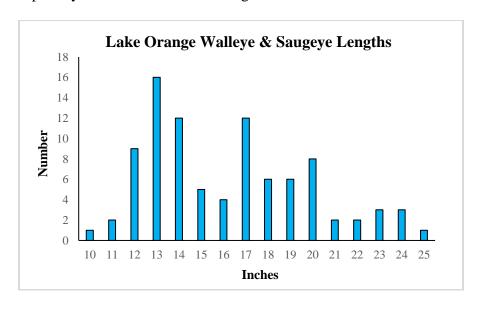
Burke Lake is located in Fairfax County – just a stone's throw from Washington D.C. Anglers in pursuit of Walleye can expect to find most fish in the 2 to 3 pound range, with some fish as large as 8 pounds. Electrofishing catch rates were 22 fish/hour

in 2021 which was a decrease from 33 fish/hour in 2020, (but well above the goal of 10/hour for small impoundments). Spring 2021 surveys resulted in 45% of Walleye being legal with a 17.8" average. An 18-inch minimum/5 per day limit is in place at Burke.



### Lake Orange

Anglers hoping to catch decent Walleye should look no further than Lake Orange as it occasionally produces fish over 5 pounds. Electrofishing catch rate was 13 fish/hour in 2021 which decreased from the 17 fish/hour in 2020. Spring 2021 surveys resulted in 35% of Walleye being legal, an increase from 2020 with a 16.7" average. Most Walleye are caught during the late spring and early summer by anglers fishing for bass, although a few anglers do specifically target Walleye here. Anglers should note that an 18-inch minimum/5 per day limit exists at Lake Orange.





Biologists will continue to monitor the Walleye populations at Lake Brittle, Burke Lake, and Lake Orange again in 2022 as part of a study to evaluate angler catch, exploitation and variable stocking rates. A cash reward of \$20 is offered for the return of the tag and catch information. Anglers can remove the tag by cutting through the monofilament attachment with a knife or scissors. The fish can then be released or harvested. Return the tag and catch information to the address printed on the tag. Catch information includes: date; general location of catch; "Was the fish harvested or released?"; "Were you fishing for Walleye?" and "Did you catch any other Walleye on this fishing trip?"

### Shenandoah River



Currently Walleye can be found in the Shenandoah River from Warren Dam in Front Royal downstream beyond the Virginia / West Virginia State line. Although they are not as numerous in the Shenandoah as they are in other rivers they are increasing in number and can reach lengths exceeding 25 inches. In the spring 2014, Department staff began an annual stocking program of Walleye fry in the Shenandoah River to supplement

the natural population and increase the number of Walleye present for anglers to target. In 2021, the river received its sixth stocking of 25,424 fingerling Walleye. Our fall samples indicate that this cohort is surviving well and growing fast, with an average size of 11 inches. Average size of the 52 Walleye collected in January of 2021 was approximately 22 inches. The largest was 29 inches. The heaviest fish collected during DWR 2021 winter sampling was 10 lbs. 14 oz. Most fish sampled were of legal harvestable size or greater. Future stockings are planned for the Shenandoah River which should further increase the population numbers to offer an acceptable Walleye fishery. Anglers fishing for Walleye on the Shenandoah River should focus their efforts in the deeper pools during the daylight hours. Walleye will move out of the deeper pools into shallow bedrock ledge areas to feed during night hours. There are typically high numbers present between Warren Dam and Morgan's Ford Access from January through March.

## Eastern Virginia



### Little Creek Reservoir

Little Creek Reservoir is a 947-acre water supply impoundment owned by the City of Newport News located within James City County near the Town of Toano, VA. The reservoir provides a good opportunity for anglers to fish for Walleye and Saugeye. James City County Parks & Recreation operates a great park that provides plenty of access to the reservoir. The Walleye population continues to provide dedicated anglers a chance at catching legal size fish greater than 18 inches with the outside chance of catching fish greater than 5 pounds. Little Creek Reservoir typically receives 94,700 Walleye fingerlings each May, with fish stocked in a pelagic manner to allow for greater dispersal. The stocking rate of 100 fingerlings/acre over the course of multiple years provided the basis for a strong Walleye population. The reservoir did not receive any Walleye fingerlings in 2019 due to hatchery production limitations and a change in allocation to other waters in Region 1. The 2020 stocking efforts consisted of Walleye fry in conjunction with a limited number of Walleye fingerlings. The 97,000 Saugeye fingerlings stocked in 2014 are still providing anglers some action. Angler catch rates of

Saugeye were high during 2016 and 2017, but Saugeye action has slowed over the last couple of years due to the high level of initial harvest and natural mortality. Anglers have reported several 5-pound plus Saugeye caught over the last couple of years. The 2021 stocking of Little Creek Reservoir consisted of a large-scale stocking of 560,000 Saugeye and Walleye fry over the course of two nights. This was the first time such a large number of fry were stocked into the reservoir. Future DWR surveys will assess this stocking technique and the overall survival rate of these fish. The stocking of fry could be a valuable tool to insure that Little Creek Reservoir has Walleye and Saugeye available to anglers.

The 2021 night electrofishing survey yielded 34 Walleye for a catch rate of 22 fish/hr. The average total length of Walleye was 19.93 inches with 30 of the 34 collected Walleye greater than the 18-inch minimum size limit (88.24%). This high proportion of "keeper-sized fish" is a reflection of gaps in recent stockings that have hurt the overall fishery. The largest Walleye measured at 23.94 inches and 4.61 pounds. The survey yielded only two Saugeye, but these female fish were of great size at 24.8 and 25.9 inches with corresponding weights of 5.89 and 7.19 pounds. The large schools of Blueback Herring, that comprise the majority of the forage base, may make fishing more difficult at various times of the year. Anglers that fished the reservoir in 2020 and 2021 had to adjust their fishing techniques to deal with a decreased water pool as Newport News Waterworks had to draw the reservoir down roughly 10 feet in preparation for repair work on the dam. Anglers should keep the continued drawdown in mind as 2022 looks to me more of the same. One of the keys to fishing on Little Creek Reservoir is to concentrate on the deeper edges in and around the numerous points that line the shoreline. The drawdown will allow anglers to scout out the various sunken islands, tapered points, and sand bars for future reference. A trusty fish finder will allow for the detection of Blueback Herring schools as well as the thermocline depth during the summer months. Anglers that fish Little Creek Reservoir for the first time should be aware that the reservoir is trolling motor use only and should plan their trip accordingly as windy days have a way of eating through charged batteries. Some of the best action has come from anglers that slow troll deep diving crank baits in the 17 to 20 foot depth range within the western half of the reservoir. Bottom bouncers with nightcrawler harnesses were another productive technique for anglers to try during the warmer weather months. Dedicated anglers will catch their fair share of Walleye surprisingly during the summer months if they are able to keep their baits in the Walleye strike zone. Anglers jigging Silver Buddy Blade Baits along with Rapala Jigging Raps can catch some quality Walleye from deep water during the cold-water months as well as during the summer. Finding that productive depth is key to finding active fish at Little Creek Reservoir. The transition months of fall can create some difficulties in finding Walleye, as the plentiful schools of baitfish appear to scatter to various creeks arms.

Walleye will congregate along the southern shoreline of the reservoir in their classic pre-spawn pattern from early March to early April as there are no large tributaries that flow into Little Creek Reservoir. Walleye will target various rock shelves in their attempt to spawn. DWR biologists continue to tag Walleye and Saugeye collected from Little Creek Reservoir as part of the statewide tagging study. Plans are in the works to conduct night electrofishing surveys in 2022 to assess the Walleye population and evaluate the fry stocking of 2021. Anglers that catch a tagged Walleye or Saugeye can

receive a \$20 reward if the tag is returned to the Region 1 DWR office with some catch information. The concession stand should have the tag return forms for anglers to pick up. Reward tags can be cut off any under-sized fish that may measure less than the minimum size limit of 18 inches. Anglers can release any fish they catch if they so desire as long as the reward tag is cut off first. The creel limit for Walleye and Saugeye is 5 fish/person/day in aggregate.



### Lake Chesdin

The Walleye and Saugeye populations within Lake Chesdin are highly dependent on DWR stocking efforts. Lake Chesdin had historically been listed as a Diversity Water on the DWR Walleye Management Plan. The lake received Walleye stockings when there is a surplus of produced fish within the DWR hatchery system. Conditions were favorable in 2013 and 2014 to allow for the stocking of both Saugeye and Walleye fingerlings. The requisition of 125,000 fingerlings was surpassed in 2015 when the hatchery staff brought 153,815 Walleye fingerlings to the lake. The 2015 Walleye year class should still provide anglers with some decent action. These consecutive stocking efforts along with additional stockings conducted prior to 2013 have created a respectable fishery. Pelagic stockings of the Walleye and Saugeve fingerlings have been successful in spreading the fish out in this 3,100-acre impoundment. The lake received another stocking of Saugeve fingerlings in 2019 after a few years of missed stockings. Stocking efforts allowed for the introduction of roughly 90,000 Saugeye fingerlings. It did not take too long for anglers to start catching this latest batch of Saugeye from various locations on the lake. The 2020 allocation consisted of two batches of Walleye fingerlings for a healthy stocking of 94,801 fish. The 2021 stocking of Lake Chesdin consisted of a mix of Walleye and Saugeye that totaled 109,633 fingerlings. Initial results of the Saugeye

stocking reveal great growth rate potential during their first growing season with fish reaching the 12 to 13 inch range by the first week of December.

The fall surveys of 2021 revealed a high abundance of Saugeye and the decent presence of Walleye. The collection of 113 Saugeye during the fall survey was a record catch rate for Lake Chesdin. Collected Saugeye ranged in size from 12.64 to 22.13 inches, with the average sized fish measured at 17.32 inches. The vast majority of collected Saugeye were fish from the 2019 stocking. Some of these 2.5-year old Saugeye were already pushing past the 4-pound weight mark. The largest Saugeye was an extremely healthy female that weighed 4.61 pounds. The Saugeye collection revealed 47.8% of fish were greater than 18 inches in total length. From all indications, the Saugeve population is taking full advantage of the Gizzard Shad forage base. The 2020 survey revealed some trophy fish potential with the collection of two older Saugeve that weighed 7.14 and 7.22 pounds. The 2021 survey failed to find any of the older Saugeye from the 2013 and 2014 stockings. The 2021 fall survey yielded the collection of 31 Walleye. Collected Walleye ranged in size from 13.85 to 21.57 inches, with the average sized fish at 18.35 inches. Although not as abundant as the Saugeye, the Walleye population showed a higher proportion of legal sized fish with 61.3% of the catch pushing past 18 inches in total length.

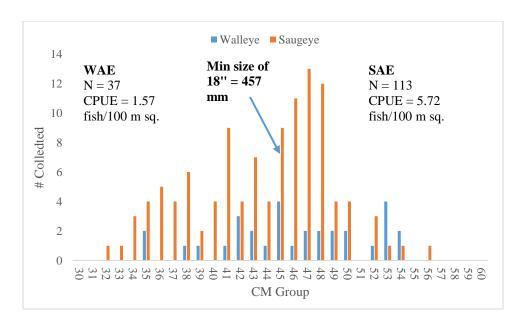


Figure 1. Length frequency distribution of Walleye and Saugeye collected from the surveys conducted on Lake Chesdin from November 30<sup>th</sup> to December 2<sup>nd</sup>, 2021

The Gizzard Shad population within Lake Chesdin is extremely abundant with a high proportion of fish in the 5 to 8-inch range. Lake Chesdin can be a difficult lake to fish due to the surplus of available forage. Anglers should not get too discouraged if they cannot find a productive pattern that works the first few times out on the lake. Anglers are encouraged to target these schools of shad, as you never know when a Walleye or Saugeye will strike a properly presented lure or bait. During the fall and winter months, these shad schools will typically concentrate toward the lower third of the lake. Anglers and boaters should easily observe the wild flocks of cormorants that invade the fishery each winter to forage heavily on the shad schools. DWR biologists began tagging

collected Walleye and Saugeye from Lake Chesdin in 2015 as part of the statewide tagging program. The fall 2021 survey provided some quality sized Walleye and Saugeye for tagging purposes. Anglers that are able to catch a Walleye or Saugeve should inspect the fish to see if there is a reward tag located just below the dorsal fin on the left side of fish's body. Anglers should contact the DWR Region 1 office (804-829-6580 ext. 126) to report collected reward tags if they would like to receive a \$20 reward check. Spring movements have shown a large proportion of the population migrating toward the upper reaches of the lake along the old river channel. Late fall into early winter has the majority of the Walleye and Saugeye congregating toward the lower third of the lake as they follow the schools of shad. The minimum size limit for Walleye and Saugeye is 18 inches with a daily creel limit of 5 fish/person in aggregate. Anglers familiar with the Walleye and Saugeve fishing action on Lake Chesdin are most likely aware of the fishable population below the dam. The Walleye and Saugeye fishing on the Appomattox River below Brasfield Dam has been yielding some positive results over the last few years from fish that managed to escape the lake. With continued stockings of Lake Chesdin, there is fair to decent chance that the fishing action in the lower Appomattox River will improve.



## Tagging Studies

Walleye tagging studies are ongoing in several of the Walleye waters mentioned above and offer valuable information to fisheries biologists about how anglers use the Walleye resources the Commonwealth invests in. If you catch a tagged Walleye send it in to the address on the tag and VDWR will send you a \$20 reward. Please be patient as it takes time to process the reward payment. Thank you for your part in helping VDWR evaluate our Walleye fisheries.

## For more information, contact the following offices:

Leesville & Philpott Reservoirs Forest Office (434) 525-7522 Staunton River Farmville Office (434) 392-9645 Lakes Orange, Burke & Brittle Fredericksburg Office (540) 889-4169 Charles City Office (804) 829-6580 Little Creek Reservoir & Chesdin Shenandoah River Verona Office (540)248-9360 Hungry Mother Lake Marion Office (276) 783-4860

Upper New River

South Holston Reservoir

Flannagan Reservoir

